AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

32. (Currently amended) A Bacillus spore which comprises a promoter and at least one genetic construct that is under the control of the promoter and that encodes a ~~therapeutically active compound~~ heterologous antigen ~~and:~~

(i) linked to a signal sequence ~~for said protein;~~

(ii) as part of a chimeric gene with a vegetative cell protein of said Bacillus, ; or

(iii) as part of a chimeric gene with the ~~rRNA of the~~ *rrnO* gene;,

wherein the spore is suitable for use in oral administration for therapeutic treatment.

33.-35. (Cancelled).

36. (Currently amended) A spore as claimed in claim 32, wherein the spore has been produced ~~genetic modification is accomplished~~ by transformation of a mother cell using said genetic construct ~~a vector containing the gene construct~~ and then inducing the mother cell to produce the spores.

37. (Currently amended) A spore as claimed in claim 32, wherein the ~~gene~~ genetic construct is under the control of one or more of, each or independently, an inducible promoter or a strong promoter or modified promoter.

38. (Cancelled).

39. (Currently amended) A spore as claimed in claim 37, wherein the ~~gene~~ genetic construct has an enhancer element or an upstream activator sequence associated with it.

40. (Previously presented) A spore as claimed in claim 32, wherein the construct comprises an inducible expression system.

41. (Previously presented) A spore as claimed in claim 37, wherein the construct comprises an inducible expression system.

42. (Previously presented) A spore as claimed in claim 32, wherein the spore germinates in the duodenum and/or the jejunum of an intestinal tract of a human or animal body.

43. (Currently amended) A spore as claimed in claim 32, wherein the antigen ~~therapeutically active compound is an antigen which, in use,~~ is adapted to elicit an immune response.

44. (Currently amended) A spore as claimed in claim 43, wherein the antigen is at least a fragment of tetanus toxin fragment C ~~or labile toxin B sub unit~~.

45.-46. (Cancelled).

47. (Currently amended) A spore as claimed in claim 37, wherein the vegetative cell protein is expressed all the time in a vegetative cell.

48. (Cancelled).

49. (Currently amended) A spore as claimed in claim 47, wherein the vegetative cell protein is OppA.

50. (Currently amended) A spore as claimed in claim 32, wherein the vegetative cell protein is expressed intermittently in a vegetative cell.

51. (Cancelled).

52. (Currently amended) A spore as claimed in claim 32, wherein the vegetative cell protein is a soluble cytoplasmic vegetative cell protein.

53. (Currently amended) A spore as claimed in claim 44, wherein the vegetative cell protein is soluble cytoplasmic vegetative cell protein.

54. (Previously presented) A spore as claimed in claim 32, wherein the spore encodes the rRNA of the *rrnO* gene.

55.-56. (Cancelled).

57. (Currently amended) A spore as claimed in claim 32, wherein the signal sequence is adapted to target the antigen ~~therapeutically active compound~~ to a specific part of the vegetative cell.

58. (Currently amended) A spore as claimed in claim 44, wherein the signal sequence is adapted to target the antigen ~~therapeutically active compound~~ to a specific part of the vegetative cell.

59. (Currently amended) A spore as claimed in claim 57, wherein the signal sequence directs the heterologous antigen ~~therapeutically active compound~~ for secretion ~~(preferably active secretion, more preferably Type I, Type II or Type III secretion)~~, or for post-translational processing by a vegetative cell ~~(preferably glycosylation)~~.

60.-66. (Cancelled).

67. (Currently amended) A composition comprising at least two different spores as defined in claim 32, wherein said at least two different spores express at least two different heterologous antigens ~~therapeutically active compounds~~.

68. (Previously presented) A composition as defined in claim 67, wherein the composition further comprises a pharmaceutically acceptable excipient or carrier.

69. (Previously presented) A composition comprising a spore as defined in claim 32 in association with a pharmaceutically acceptable excipient or carrier.

70.-74. (Cancelled).

75. (Withdrawn and Currently amended) A method of medical treatment for vaccinating a human or animal, which method comprises the steps of ~~a)~~ orally administering a Bacillus spore ~~as defined in claim 32~~ to human or animal ~~in need of medical treatment;~~ where the administered Bacillus comprises a promoter and at least one genetic construct that is under the control of the promoter and that encodes a heterologous antigen and

(i) a signal sequence for said heterologous antigen,

(ii) is part of a chimeric gene with a vegetative cell protein of said Bacillus, or

(iii) as part of a chimeric gene with the *rrnO* gene,

wherein the spore is suitable for use in oral administration for therapeutic treatment

~~b) said spore generminating into a vegetative cell in the intestinal tract;~~

~~c) said vegetative cell expressing a therapeutically active compound for use in the medical treatment~~.

76.-79. (Cancelled).

80. (New) A spore as claimed in claim 59, wherein the signal sequence directs the therapeutically active compound for active secretion or for post-translational processing by glycosylation.

81. (New) A spore as claim in claim 80 wherein the active secretion is Type I, Type II or Type III secretion.